

## **News Release**

U.S. Department of the Interior U.S. Geological Survey

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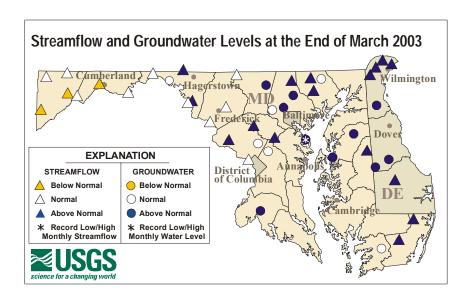
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## Water Levels High in March - Water Restrictions Lifted

Snowmelt and above normal rainfall in February and March have replenished the water supply in Maryland and Delaware. Reservoirs are nearly full and water restrictions have been lifted in Maryland. Streamflow and groundwater levels ranged from below normal to above normal across Maryland and Delaware in March, according to hydrologists at the U.S. Geological Survey (USGS) in Baltimore. Although the current water supply is abundant and drought conditions like those in 2002 are unlikely to be seen during the coming summer, wise water use is always recommended. For information on freshwater use and withdrawals by county in Maryland through the year 2000, see <a href="http://md.water.usgs.gov/freshwater/withdrawals/">http://md.water.usgs.gov/freshwater/withdrawals/</a>.

With high streamflow and groundwater levels, there is an increased risk of flooding this spring. Since the drought began, the USGS, in cooperation with other agencies, has equipped 25 additional streamflow stations with real-time data-transmission capability. Real-time streamflow data are essential to gauging stream response to runoff, and can be used to monitor possible flooding. During March, real-time technology was added to eight streamflow stations: three sites in the Gunpowder River watershed, and five sites in the Patapsco River watershed. Streamflow data can be monitored on the web at <a href="http://waterdata.usgs.gov/nwis/rt">http://waterdata.usgs.gov/nwis/rt</a>.



For news release and images, go to <a href="http://md.water.usgs.gov/publications/press">http://md.water.usgs.gov/publications/press</a> release/current/.

Streamflow at the end of March and monthly streamflow ranged from above normal to normal at most USGS streamflow-gaging stations across Maryland and Delaware, except in western Maryland, where several stations showed below normal streamflow levels. Five-year monthly streamflow hydrographs can be viewed on the USGS website at <a href="http://md.water.usgs.gov/surfacewater/streamflow/">http://md.water.usgs.gov/surfacewater/streamflow/</a>. Average monthly streamflow at the Potomac River near Washington, D.C. was 96 percent above normal (see graphs at <a href="http://md.water.usgs.gov/monthly/poto.html">http://md.water.usgs.gov/monthly/poto.html</a>).

Total flow into the Chesapeake Bay during March averaged 144 bgd (billion gallons per day), which is 49 percent above average. Higher flows may occur this spring, which could lead to degraded water-quality conditions in the spring and summer as larger amounts of nutrients and sediment are carried into the Bay. Higher nutrient levels lead to algal blooms, which can decrease the amount of dissolved oxygen in the Bay and result in fish kills. The algal blooms, along with increased amounts of sediment, can cause a decrease in the light needed by the underwater grasses in the Bay. The grasses are important habitat for crabs and food for waterfowl. More information about water and the Chesapeake Bay can be found at <a href="http://chesapeake.usgs.gov/">http://chesapeake.usgs.gov/</a>.

Groundwater levels have responded to the abundant rainfall in the region has been experiencing by recharging the surficial aquifers. Groundwater levels across Maryland and Delaware were in the normal to above normal range at the end of March. A new monthly record high was set in a well in Anne Arundel County, and water levels in a deep, bedrock well in Baltimore County, Maryland rose by almost 3 feet during March. For 5-year hydrographs of groundwater levels, visit: <a href="http://md.water.usgs.gov/groundwater/">http://md.water.usgs.gov/groundwater/</a>.

Reservoir storage levels increased in March, allowing the water restrictions that had been in place since last year for part of central Maryland to be lifted. Storage in the Baltimore Reservoir System increased 19 percent to 96 percent of capacity at the end of March. The contents of the Triadelphia and Duckett Reservoirs on the Patuxent River also increased and are now at 108 percent of capacity. Reservoir data graphs can be viewed at: <a href="http://md.water.usgs.gov/waterwatch">http://md.water.usgs.gov/waterwatch</a>.

Streamflow and groundwater levels are used to gauge water conditions and may be used to predict the potential for flooding and drought conditions. These USGS data have been provided to State and local water resource managers and are critical for making appropriate decisions on water restrictions. For more information on streamflow and groundwater levels in Maryland and Delaware, see Water Watch at: <a href="http://md.water.usgs.gov/waterwatch">http://md.water.usgs.gov/waterwatch</a>.

The real-time streamflow stations used in this analysis are operated in cooperation with the Maryland and Delaware Geological Surveys, the Maryland State Highway Administration, the U.S. Army Corps of Engineers, the Maryland Department of Natural Resources, the Maryland Department of the Environment, Baltimore County, and other agencies. The observation wells used in this analysis are operated in cooperation with the Maryland and Delaware Geological Surveys. The USGS publishes data for 128 streamflow stations and 379 wells across Maryland and Delaware.

The USGS serves the Nation by providing reliable scientific information to describe and understand the Earth; minimize loss of life and property from natural disasters; manage water, biological, energy, and mineral resources; and enhance and protect our quality of life.

\* \* USGS \* \* \*